



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

for the practice of all kinds of musical instruments, but particularly of the pianoforte. The mechanical arrangements for governing the exercises are attached to a piece of mahogany or other wood, which is nineteen inches long, by twelve and a half wide, and one inch in thickness, and which is fitted with various levers, springs, straps, keys, &c., in such a way as to render it easy of adjustment to a hand of any size, and to constrain the hand to follow the action required in musical practice, attention being particularly directed to the fourth finger, which is the least susceptible of free and independent motion.\* As the whole of the apparatus does not weigh more than six pounds, it is very portable; and from its nature it is noiseless, so that the exercises may be practised without interruption to persons situated in the same or adjoining apartments.

---

No. XIX.

DR. ROTH'S CALCULATING MACHINE.

By MR. WERTHEIMBER.

THE automaton calculator, invented by Dr. Roth of Paris, and laid before the Society by Mr. Wertheimber, is an instrument by which various sums, either simple or compound, may be rapidly and accurately added together, provided the whole amount does not exceed 999,999, or 999,999*l.* 19*s.* 11*½d.*

The instrument consists of an oblong mahogany box, fifteen and a half inches long, and two and a half inches wide, and one inch thick, having a metal plate at top, in which are nine semiannular perforations, beneath which

are fixed the requisite trains of wheels ; round the perforations are engraved the index figures, opposite to which, in the perforations, are the teeth of the corresponding wheels.

Under the indices are nine circular holes, in which the numbers set down appear as if written on paper or a slate.

To set down any required figure, a pointer is inserted in the notch corresponding with that figure on the index, and, by pressing the pointer against the left-hand tooth of the notch, it is moved down to the left extremity of the annular perforation, and the figure is at once exhibited in the circular hole beneath. When the operation of adding up any amount within the range already mentioned is finished, it is requisite that 0 should be shewn in each of the nine circular holes before another operation can be performed. This is done by pulling out a slide at the left end of the instrument, which slide gives 999,999*l.* 19*s.* 11½*d.*, and, by adding ¼*d.*, the nine 0's are exhibited at once.

---

### No. XX.

#### ELLIS'S TURN-TABLE.

By B. ROTCH, Esq. V.P.

March 6, 1844.

B. ROTCH, ESQ. V.P. IN THE CHAIR.

THIS ingenious invention obviates one of the greatest objections to the turn-table, which is, its being supported on numerous small friction-rollers under its outer edge, as well as on a central pillar. The object of these rollers